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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,206	02/09/2001	Michael Fritz	RDID0028US	5556
48801	7590	10/24/2006	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 SOUTH WACKER DRIVE SUITE 3200 CHICAGO, IL 60606			CHUNDURU, SURYAPRABHA	
			ART UNIT	PAPER NUMBER
			1637	

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/780,206	Applicant(s) FRITZ ET AL.	
	Examiner Suryaprabha Chunduru.	Art Unit 1637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-41, 68-73 and 76-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-41, 68-73 and 76-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Applicants' response to the office action filed on August 28, 2006 has been entered.

***Status of the Application***

2. Claims 36-41, 68-73, 76-79 are pending and claims 1-35, 42-67, 74-75 are cancelled. All amendments and arguments have been thoroughly reviewed and deemed not persuasive for the reasons that follow. This action is made FINAL. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Response to arguments:***

3. With regard to the objection to the specification, Applicants' arguments and amendments are fully considered and found persuasive. The objection is withdrawn herein in view of the amendment.
4. With regard to the rejection of claims 36-41 and 69-76 under 35 USC 102(b) as being anticipated by Zanzucchi et al., Applicants' arguments are fully considered and found unpersuasive. Applicants argue that Zanzucchi et al. does not teach a binding space that includes at least part of an amplification space and assert that connecting channel that connects the first well and a second vessel of Zanzucchi et al. does not participate either in nucleic binding or in amplification. The arguments are found unpersuasive because the instant claim 36 does not require that the at least a part of the space is required for binding as well as for amplification, rather it only recites that "at least a part of the amplification space is identical to a part of the binding space". Thus the connecting channel is interpreted as a part having a part of binding and a part of amplification space. In the above rejection Examiner clearly indicated that the binding space and the amplification space are connected by a connecting channel indicating that the

binding space and amplification space are within the proximity to each other and there is no requirement to show that connecting channel participates in binding and amplification since connecting channel represents only to indicate that the amplification space and binding space are inter connected and represent that at least part of amplification space is within the binding space.

With regard to the claims 39 and 40, 72, Applicants argue that Zanzucchi et al. does not teach a capillary vessel surrounded by a heatable metal layer and assert that the metal described by Zanzucchi et al. is part of an etching process and is not associated with heating the vessel and argue that the metal layer does not surround the vessel. The arguments are found unpersuasive because metal layer surrounding the vessel implicates that the metal layer is exterior to the vessel and because the claims are in open comprising format the instant claims do not exclude additional steps as etching metal layer on the vessel. Further the new claim 79 recites that the metal layer is exterior of the vessel, which clearly is anticipated by Zannuachi et al. because the metal layer is exterior to the vessel (well) taught by Zannuchi et al. For the reasons discussed above, Zannuchhi et al. does teach the limitations in the instant claims therefore the rejection is maintained herein.

5. With regard to the rejection of claims 36-41 and 68-76 under 35 USC 102(e) as being anticipated by Yasuda et al. Applicants' arguments are fully considered and found unpersuasive. Applicants argue that col. 9, line 5-36 of Yasuda et al. does not teach that the PCR happens in chambers 731 and 733, and not in chamber 732 and also argue that the distinct spaces are not partly the same. Applicants' arguments are fully considered and found unpersuasive. As discussed above, the instant claims do not recite that the common part, that is, the part identical to both amplification space and binding space does involve both the functions of binding nucleic

acids and also amplification of the nucleic acids. With regard to the claims 38, 40, 68, 72, Applicants argue that Yasuda et al. does not teach heatable metal layer surrounding the vessel. Applicants argue that the oxide of Yasuda et al. may surround the reaction space but not the vessel. Applicants' arguments are found unpersuasive because the heatable metal layer taught by Yasuda is a glass capillary wherein the inner surface is coated with a stable oxide, thus the glass represents heatable metal layer which surround the reaction space wherein the inner surface is coated with an oxide for oxidation of metal. Therefore the rejection is maintained herein for unpersuasive arguments.

6. With regard to the rejection of claim 68 under 35 USC 102(e) as being anticipated by Andersen et al. Applicants' arguments are found unpersuasive. Applicants argue that Andersson et al. does not teach capillary reaction vessel surrounded by a heatable metal layer and argue that Andersson et al teach that heatable metal layer surrounds exterior of the vessel. Applicants' arguments are found unpersuasive because capillary vessel is made up of a metal that is electrically conductive material that does teach a metal layer surrounding the capillary space and therefore the rejection is maintained.

7. With regard to the rejection of claims 36-38, 69-73 under 35 USC 102(e) as being anticipated by Fields Applicants' arguments are fully considered and found unpersuasive. Applicants argue and disagree that the interpretation of spaces that are connected by valves and tubing can be part of the same space. Applicant's arguments are found unpersuasive because the three-way connecting valves unite all the three spaces and thus the limitation that 'at least part of the space' does read on the teachings of Fields and therefore Fields does anticipate the instant claims.

Further as discussed above the instant claims do not recite that at least the part of the space that

is common or identical in all the three spaces does the required function, that is, the function of binding nucleic acids, amplification of nucleic acids and detection of nucleic acids in the part that is common to the spaces. Examiner notes that the connecting valves clearly connect all the three spaces and thus the limitation 'at least part of' clearly anticipates the instant claims.

Therefore the rejection is maintained herein.

***Conclusion***

No claims are allowable.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M , Mon - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Suryaprabha Chunduru  
Primary Examiner  
Art Unit 1637

*Suryaprabha Chunduru*  
SURYAPRABHA CHUNDURU 10/18/06  
PATENT EXAMINER